PART II: LEGACY PLACES
Chapter 3: The Identification and Representation Process

A. HOW THE LEGACY PLACES WERE IDENTIFIED

Two types of Legacy Places are described in the following pages. First, and comprising the bulk of the report, are specific places arranged by ecological regions of the state. Many of these places are well known and have played an important role in meeting today's conservation and recreation needs while others, although possibly unfamiliar to most readers, may be no less important in helping to meet future needs. Together, these 228 named Legacy Places cover a broad range of resource types and recreation needs.

Second, is a small group of statewide "places" that are more generic in nature. These tend to be types of resources or needs that occur, or could be met, at many locations around Wisconsin. Identifying the specific places that will best meet these statewide needs will require additional study and, in some cases, will be dependent upon future environmental and social conditions.

The named Legacy Places were identified in a two-step process. First, criteria were developed to identify the *types* of places believed to be critical in meeting conservation and recreation needs. Second, these criteria were applied to identify specific places using data on the distribution of various ecological, population, and geographical features, as well as the professional judgment of Department staff and the personal knowledge of the public.

The criteria were developed based on input from a series of public and staff meetings held in early 2000. People attending those meetings provided considerable information about what was important to them with respect to Wisconsin's natural environment and different types of outdoor recreation. Based upon the information received at those meetings, Department staff developed a set of criteria to help identify places that may best meet these needs. The thirteen criteria developed are grouped together in seven major themes in the accompanying table. More detailed information on these criteria is presented in Appendix C.

In applying these criteria, Department staff first compiled several existing databases pertaining to a variety of environmental and recreation issues. Some of these data sets are represented in the maps seen in Part I of this report. However, for many of the criteria, statewide data are not available or could not be readily collected and represented. For example, the Department's Natural Heritage Inventory database contains substantial information on where populations of endangered, threatened, and special concern species occur (or have occurred) in Wisconsin. However, the database is not designed to identify the habitat most critical for maintaining these populations. As such, the database (which is the most comprehensive collection of information on rare species and natural communities in the state) cannot be easily applied to identifying and delineating the boundaries of places most important in "supporting high-quality natural areas, important populations of rare species, or regionally significant biological or geological resources" (see criteria at right). Similarly, although plat books show ownership parcels, no spatially-referenced, statewide database exists depicting the distribution of parcel size and how parcel sizes have changed over time. As a result, there is no simple way to represent which parts of the state offer the best opportunities to protect large, minimally fragmented landscapes.

In response to this lack of comprehensive, easily accessible information, Department staff were asked to initially identify places that best fit the criteria, based on their professional knowledge of Wisconsin. One hundred ninety five places were then presented to the public at a series of eight open houses held around the state. The public response was overwhelmingly in support of the places identified. The primary suggestion from the public was to add a number of other places to the list.

In total, over one thousand ideas were submitted on places believed to be critical in meeting conservation and recreation needs. These recommendations were sorted, evaluated, and consolidated into the 228 "Legacy Places" and the 79 "Other Areas of Interest" described in this report.

Criteria used to identify Legacy Places

A) Protect and Maintain the Pearls

0) Lands and their adjacent waters supporting high quality natural areas, important populations of rare species, or regionally significant biological or geological resources.

0) Lands containing unique or exceptional natural scenic beauty or lands that provide outstanding scenic views.

B) Maintain Functioning Ecosystems – Keep Common Species Common

3) Lands in each ecologically distinct part of the state that support and sustain the area's representative species, habitats, and ecological systems.

C) Maintain Accessibility and Usability of Public Lands and Waters

4) Lands and adjacent waters near population centers that support, or could reasonably be restored to support, native plants and animals and their habitats.

5) Lands that ensure that public lands and waters can support their desired recreational uses and biological components over time.

6) Lands that improve access to, or use of, existing public lands and waters where recreational demands warrant.

D) Ensure Abundant Recreation Opportunities

0) Lands that address high priority gaps or unfulfilled needs in outdoor recreation.

8) Lands that provide significant opportunities for fishing, hunting and other outdoor activities.

E) Think Big

9) Lands that allow the protection of large, minimally-fragmented, ecologically functional landscapes.

F) Connect the Dots – Create a Network of Corridors

10) Lands that complete a statewide network of land and water-based recreational trails and provide linkages to population centers.

11) Lands that establish an interconnected network of corridors (incorporating existing conservation lands and a variety of landscape features) that maximize ecological benefits.

G) Protect Water Resources

12) Lands that most effectively contribute to the protection and improvement of the quality of water used by municipal drinking water systems.

13) Lands that most significantly contribute to the quality and quantity of surface waters.

B. How the Legacy Places are organized in the Report

As one travels around the state, it is apparent that Wisconsin harbors a wide variety of terrestrial and aquatic habitats. From the thousands of small lakes in Vilas and Oneida Counties to the steep, wooded valleys and spring creeks of the Driftless Area to the gently rolling, productive farmland along the Rock River, the state contains a remarkable diversity of lands and waters.

Of course, no two places are the same; each forest, wetland, grassland, stream, and lake contains a unique collection of plants and animals. But, based on environmental conditions and ecological processes, similar habitats support similar collections of species, often in similar concentrations. For example, areas of native vegetation in the southern part of the state that are south-facing, have well-drained and reasonably fertile soils, and are subject to frequent fires often harbor scattered bur and white oak trees amidst a variety of native grasses and forbs. Ecologists refer to collections of native plants and animals that consistently occur together under similar conditions as "natural communities."

Examples of natural communities in Wisconsin include northern mesic forest, calcareous fen, pine barrens, dry-mesic prairie, and southern hardwood swamp. Some community types are common; others are rare, either because they have been converted to other land uses (e.g., prairies and savannas), or have always been minimally distributed in the state (e.g., boreal forests and algific talus slopes). Clearly, human use of the landscape has altered, and continues to alter, the extent, distribution, and composition of natural communities in Wisconsin.

Similar to the grouping of collections of species into natural communities, collections of natural communities that consistently occur together can, in turn, be grouped. Over the years, many systems to delineate and classify aquatic and terrestrial habitats with similar characteristics and capabilities have been used. These classification systems are typically based on a variety of factors, including climate, soils, hydrography, water chemistry, stream order, topography, and vegetation. Different classification systems evaluate the landscape at different scales, with some systems designed to fit multiple scales.

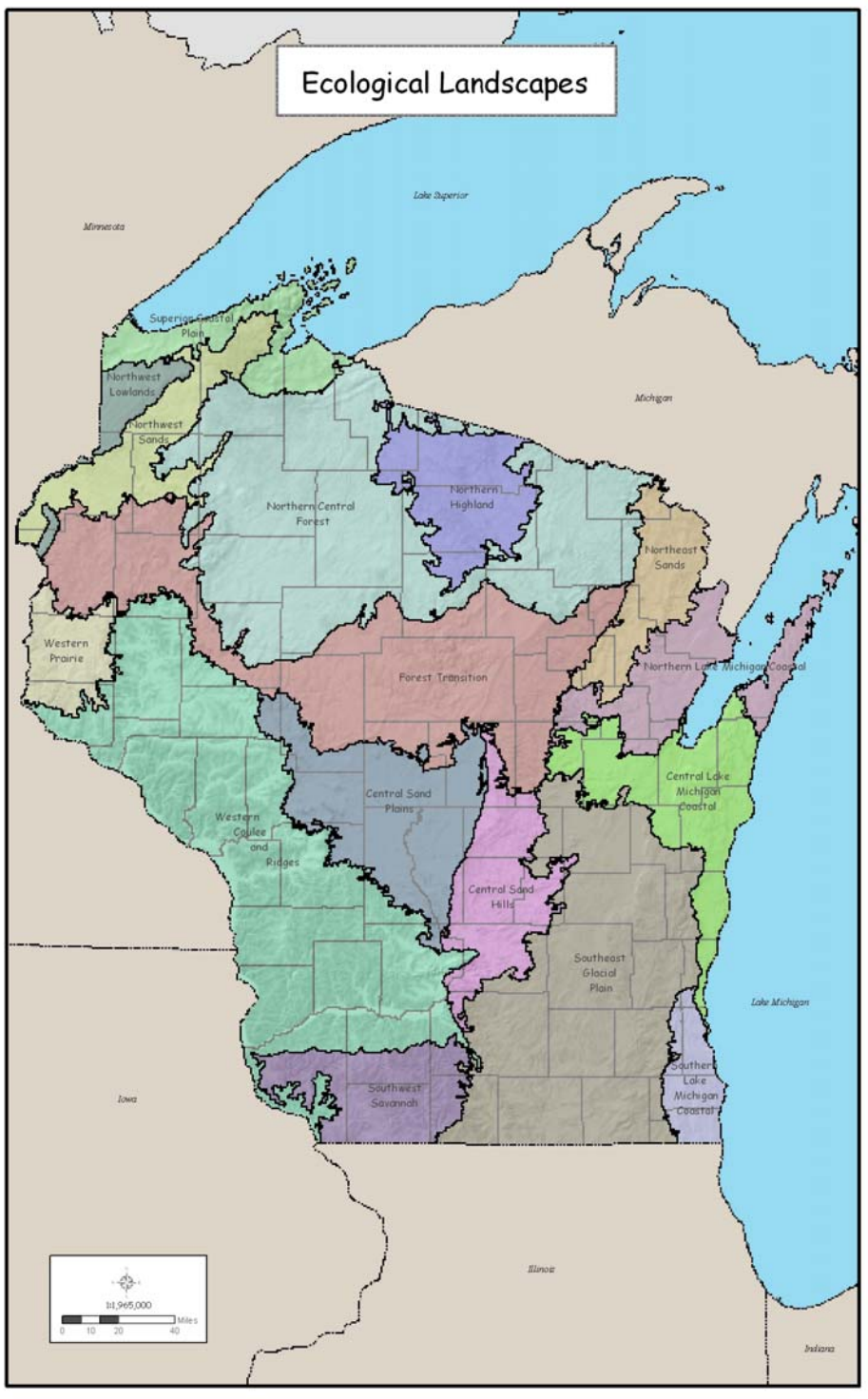
The Department of Natural Resources recently adopted a classification system (based on the system developed by the US Forest Service and many collaborators) to consistently organize its land-based ecological planning, management, and monitoring activities. This system divides the state into 16 ecologically similar regions, based on soils, existing and pre-settlement vegetation, topography, and types of aquatic features present. Referred to as "Ecological Landscapes," they each have their own "look and feel." They also have unique sets of conservation needs and opportunities.

In this report, we use Ecological Landscapes as the primary means to organize the Legacy Places. We chose this system, rather than watersheds, counties, DNR Regions, or other options, because Ecological Landscapes appear to offer the best opportunity to put into context how these places might help meet future conservation needs.

About two-thirds of the places identified in this report are centered around, or have as key components, rivers, lakes, or wetlands. Although the 16 Ecological Landscapes may not be ideally suited to organize water-based resources, waters within each of these landscapes often share many characteristics and attributes. No doubt, additional evaluation of these water-based Legacy Places by watershed, basin, stream order, or lake type would be appropriate.

Recreation needs and opportunities are, of course, not easily organized by ecological regions, watersheds, counties, or other systems that break the state into sections. We attempt to incorporate recreation issues by Ecological Landscape simply because there appears to be little value in using a different (and potentially equally problematic) organizational system to present recreation needs and opportunities.

FIGURE 33: Ecological landscapes of Wisconsin.



As readers will see, several Legacy Places span two or, in a few cases, three ecological landscapes. When a place occurs *substantially* in an ecological landscape, it will appear on the maps and in the descriptions for that landscape. For example, the Black River occurs substantially in the Forest Transition, Central Sand Plains, and Western Coulee and Ridges Ecological Landscapes and appears on the maps and in the write-ups of all three. The Milwaukee River occurs substantially only in the Southeast Glacial Plain and only slightly in the Central Lake Michigan Coastal and Southern Lake Michigan Coastal ecological landscapes. Although the Milwaukee River can also be seen on the maps in these latter two landscapes, the reader is referred to the Southeast Glacial Plain for the write-up.

The Legacy Places within each ecological landscape are presented in alphabetical order. Because the Legacy Places along the Great Lakes shoreline, the Kettle Moraine, and the Mississippi River share several similar conservation and recreation attributes, they are grouped together within the ecological landscapes in which they occur.

C. How the information is presented

Each of the Ecological Landscapes is treated as a separate section within Chapter 4. The first page of each of these sections has two locator maps, the list of specific Legacy Places within the Landscape, some "quick facts" about the Landscape and its notable features, and then descriptions of the Landscape's general attributes and conservation and recreation opportunities. This first page is not intended to be a comprehensive examination of the Ecological Landscape. Rather, it is designed to provide the reader with a short explanation of what makes this region of the state different from others and what the Landscape is well suited to address, from both a conservation and recreation perspective.

Maps

The Legacy Places are depicted on two maps: one showing public conservation lands and the other showing the predominant land or "vegetative" cover (urban, agricultural, forest, wetland, etc.) The places are represented as dots on these maps primarily because, at the current time, not enough information is available to specifically identify which lands and waters associated with each Legacy Place are most appropriate to protect. Determining this will require significantly more detailed and locally-led evaluation that includes local landowners, citizens, and governments.

> The Places are represented as dots primarily because, at the current time, not enough information is available to specifically identify which lands and waters associated with each Legacy Place are most appropriate to protect.

Four of the Ecological Landscapes (North Central Forest, Forest Transition, Western Coulee and Ridges, and Southeast Glacial Plain) cover very large areas. For ease in viewing, the maps showing these Landscapes have been split in half to increase their scale. What follows is an explanation of the information on each map:

Public Conservation Lands map

Information on this map includes:

- Ecological Landscape boundary
- Public conservation lands
  Only lands that are owned in fee by federal, state and county governments are shown on the map. Lands that are leased, rented, or eased are not included here.
  Federal = **purple** numbered triangles
  State = **green** numbered triangles
  (lands shown include those owned by the Department of Natural Resources and the Board of Commissioners of Public Land)
  County Forest = **tan** numbered triangles

  Property names - can be found in the Public Conservation Lands table at the end of each Ecological Landscape chapter.
  Property boundaries - for state conservation lands, project boundaries (the area within which the Department is authorized to offer to purchase land) are shown where they exist. Project boundaries are not shown for federal or county properties.
  For further explanation of lands that are included (and those that are not), please refer to the explanation accompanying the Public Conservation Land pie chart.
- County boundaries
- Civil Township boundaries
- Major roads
- Cities (named) and Villages (shown, but not named)
- Shaded relief – has been exaggerated so topographic relief can be more easily seen.

Land Cover map

Information on this map includes:

- Ecological Landscape boundary
- Land cover types, which have been consolidated into eight categories, defined as follows:
  Urban – areas associated with intensive human activity and land use. Examples include residential, commercial, and industrial areas, shopping malls, golf courses, and parking lots.
  Agriculture - areas under cultivation for food or fiber. Examples include row, forage, and small grain crops, and cranberry beds.
  Grassland - areas covered by non-cultivated herbaceous vegetation dominated by grasses, grass-like plants or forbs. Examples include pasture, idle farmland, land enrolled in the Conservation Reserve Program, fields of timothy, rye and "volunteer" grasses, and restored prairie.
  Shrubland – areas covered by vegetation with a persistent woody stem, less than 20 feet in height, coverage of at least one-third of the land area and less than 10% tree cover interspersed. Examples include areas dominated by buckthorn, sumac, and scrubby oak.
  Forest - upland areas covered with woody, perennial plants reaching a mature height of at least 6 feet with a definite crown. Examples include:
  Coniferous forest (those dominated by pine, spruce, or hemlock),
  Broad-leaved deciduous forest (those dominated by aspen, oak, maple, birch, or poplar), and
  Mixed coniferous/deciduous forest.
  Open Water - areas of water with no vegetation present.
  Open and Shrub Wetland - areas with water at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation, and which has soils indicative of wet conditions. Examples include:
  Emergent marsh and wet meadow dominated by cattails, sedges, and marsh grass, and
  Lowland Shrub dominated by willow, alder, Labrador-tea, leather-leaf, and stunted black spruce.
  Forested Wetland – wetland areas dominated by woody perennial plants, with a canopy cover greater than 10% , and trees reaching a mature height of at least 6 feet. Examples include areas dominated by black ash, swamp white oak, black spruce, northern white cedar, or tamarack.
  For further explanation of how the land cover types were consolidated, please refer to the explanation accompanying the Land Cover pie chart.
- Watershed boundaries and names (in white)
- County boundaries
- Civil Township boundaries
- Major roads
- Cities (named) and Villages (shown, but not named)
- Shaded relief – has been exaggerated so topographic relief can be more easily seen.

Table of Public Conservation Lands

This table corresponds to the numbered triangles on the "Legacy Places and Public Conservation Lands" map. The table lists the names of only the larger blocks of public conservation properties (generally those over 100 acres). The acreage figure presented for each property only includes those acres in the particular Ecological Landscape. For example, the Brule River State Forest straddles three Ecological Landscapes. Of its 40,280 acres; 15,090 acres are within the Superior Coastal Plain; 690 acres are within the Northwest Lowland; and 24,500 acres are within the Northwest Sands.

The Department maintains records of lands enrolled in the County Forest program. These lands are depicted on the maps and their acreage figures are included in the accompanying table. Unfortunately, no statewide GIS coverage of other County or municipally owned recreation and conservation areas exists. Some counties and some cities own large tracts of land; due to the difficulty determining how many acres fall within each Landscape, they are only included in these tables in a few instances.

Other Areas of Interest

Many areas were recommended for inclusion in the study. Those that appear to best meet the criteria *from a statewide perspective* are included in the 228 Legacy Places. Many other sites were recommended that are also important, but from a more local or regional perspective. These areas are also worthy of consideration for protection and are included in the boxes titled, "Other Areas of Interest." For these areas, it appears most appropriate for organizations and groups other than the Department of Natural Resources to take the lead in identifying and implementing protection strategies.

Pie Charts and Graphs

For each Ecological Landscape, four graphics are included that depict different aspects of the area's land cover and public land ownership. They are explained below, using statewide data as an example.

LAND COVER

The information on the different types of land cover across the state is derived from satellite imagery taken from 1991-1993 (the most recent data available). To simplify both the maps and the pie charts in this report, the cover types have been consolidated into eight categories (urban, agriculture, grassland, shrubland, forest, forested wetland, open/shrub wetland, and open water). The characterization of Wisconsin's land cover also included two other categories: bare land (areas with less than one-third vegetative cover) and cloud cover (areas where clouds prevented the accurate identification of land cover). Areas designated as "bare land" are scattered throughout the state and appear to be a combination of major roads, recently plowed farm fields, sand and gravel operations, and large areas under construction or recently cleared. Thus, these areas (which total about 390,000 acres – just over 1% of the state) appear to more appropriately fit into one of the other land cover types. Areas designated as "cloud cover" account for only about 4,000 acres and are concentrated in just a few places. To simplify the number of land cover categories presented on the maps and in the pie charts, the bare land and cloud cover acres have been folded into one or more of the eight categories listed above. This was accomplished by roughly extrapolating land cover on adjacent areas.

See the preceding description of the Land Cover maps for further explanation of the specific land cover types.

FIGURE 34: Land cover in Wisconsin.

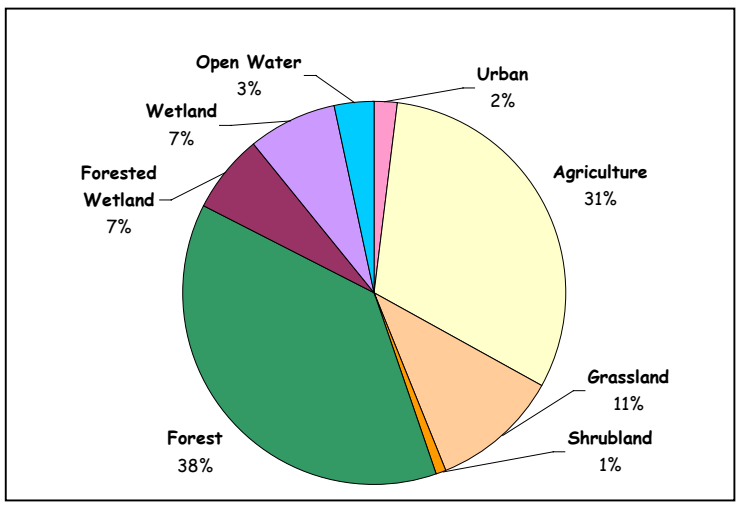
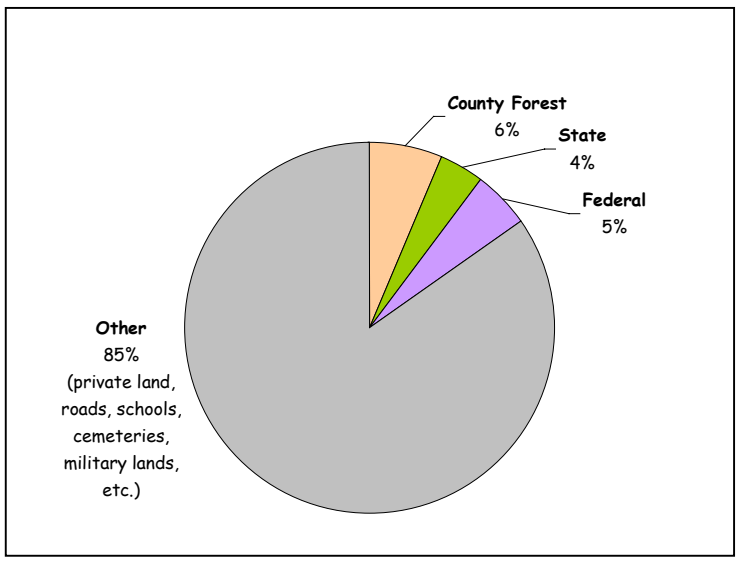


FIGURE 35: Public conservation and other land ownership in Wisconsin.



PUBLIC CONSERVATION LAND

Of Wisconsin's 35 million acres, approximately 5.7 million are owned by public conservation agencies. However, not all public conservation lands are represented in the pie chart. Most noticeably, lands owned by counties that are not enrolled in the Forest Crop Law (popularly known as the County Forest program) and municipal conservation lands are not included here because uniform, statewide, spatially-referenced data are not readily available. Thus, most county and local parks, forests, natural areas, nature preserves, and recreation areas are not included in the pie charts. Some counties and municipalities own substantial conservation and recreation properties. The largest of these, Superior Municipal Forest, Sheboygan Marsh County Park, and the Milwaukee County park system, have been included in the list of public lands that accompanies each ecological landscape.

Lands owned by the Department of Natural Resources as of December 31, 2000 are included here. Most lands purchased since then, an estimated 30,000 acres, have not yet been fully entered into the Department's land records database. Similarly, federal land holdings as of 1990 are shown. More recent acquisitions, of which there are very few, are not included here because data are not readily available.

It should also be noted that these figures include only *public conservation* lands. Other publicly owned lands include roads, schools, military lands, and some utility infrastructure. Information on their location and size is not readily available and as such they are not included here. Similarly, many private organizations own or manage lands of great conservation and recreation value. Unfortunately, as with locally-owned properties, there is no uniform, statewide, spatially-referenced database representing these lands.

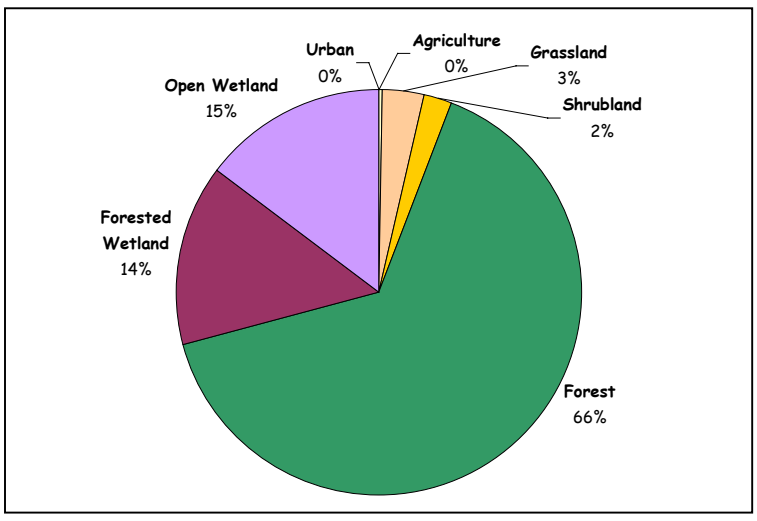
LAND COVER OF PUBLIC CONSERVATION LANDS

This chart shows the land cover occurring on *only the public conservation lands* in this Ecological Landscape. The same considerations stated in the Land Cover section above apply here. One can see in these charts how the land cover of public properties compares

to the land cover within a broader area (e.g., an Ecological Landscape). For example, comparing the pie chart at right with the pie chart at the top of the page, one can see that public lands contain significantly more forest and wetland, and significantly less agricultural land and grassland, than does the state as a whole.

One difference to note is that the category "open water" is not included here. This is due to confusion that results from differences in ownership of the beds of lakes, rivers, and flowages. All navigable *waters* are held in trust for the people of the state, through what is referred to as the "Public Trust Doctrine." The beds of natural lakes and the natural portion of "raised lakes" (those that have outfall structures maintaining their levels) are considered to be publicly owned. The waters within streams, rivers and flowages, like lakes, are held in the public trust. Their beds, however, typically are private land and, in most cases, are part of adjoining parcels. Exactly how much public land falls under streams, rivers, and flowages is unknown and thus the category "open water" is not included here.

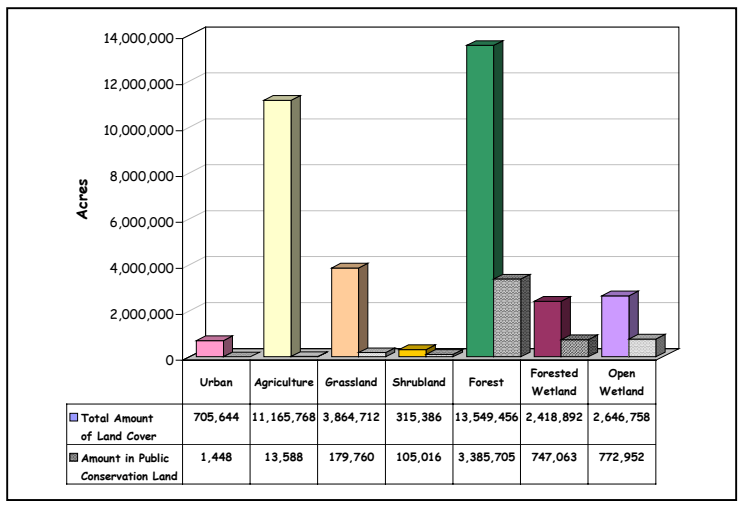
FIGURE 36: Land cover of public conservation land in Wisconsin.



AMOUNT OF EACH LAND COVER TYPE OCCURRING ON PUBLIC CONSERVATION LAND

This graph shows how much of each land cover type occurs on public conservation land -- in essence the "flip-side" of the graph above. With this graph, one can see how much of each land cover is within public conservation property, relative to the total amount of each land cover type within a given area. For example, of all the wetlands in the state (2.6 million acres), about 770,000 acres (30%) are in public conservation ownership. As with the graph above, the "open water" category is not included.

FIGURE 37: Amount of each land cover type occurring on public conservation land in Wisconsin.



	Urban	Agriculture	Grassland	Shrubland	Forest	Forested Wetland	Open Wetland
Total Amount of Land Cover	705,644	11,165,768	3,864,712	315,386	13,549,456	2,418,892	2,646,758
Amount in Public Conservation Land	1,448	13,588	179,760	105,016	3,385,705	747,063	772,952

D. How the values were determined

At the beginning of the descriptions of each of the Legacy Places are values for five different characteristics: the general size of the area that appears worthy of consideration for protection, the amount of protection effort that has already been initiated, the amount of protection need that appears to remain, and the relative conservation and recreation values of the Places. How these values were determined is described below.

As mentioned earlier, several of these Legacy Places span two or more Ecological Landscapes. In cases where a Legacy Place occurs in more than one Landscape, its "size value" remains the same in both Landscapes, even though it may occur mostly in one. For example, the Border Lakes Legacy Place occurs predominantly in the North Central Forest Ecological Landscape with a small amount in the Northern Highland Ecological Landscape; it is considered to be "large" in both Landscapes.

However, for the other four categories (protection initiated, protection remaining, conservation significance, and recreation potential), when significant differences occur across the Ecological Landscapes, they are noted. For example, the Peshtigo River has quite different characteristics in the Northeast Sands Ecological Landscape than in the Northern Lake Michigan Ecological Landscape and as such gets different scores for both Conservation Significance and Recreation Potential in the two landscapes. Similarly, the Black River crosses three Ecological Landscapes, but in only one (the Central Sand Plains) has much protection work been initiated.

FIGURE 38: An example of a description box for a Legacy Place.

A Legacy Place

Size ……	Large
Protection Initiated……	Limited
Protection Remaining……	Substantial
Conservation Significance……	✶✶✶
Recreation Potential……	✶✶✶✶

A short description of the place and its conservation and recreation values.

Size

Some features in Wisconsin's landscape are readily identifiable and relatively easy to draw lines around (for example, Horicon Marsh and the Blue Hills). Rivers, streams, and lakes are easy to see on the maps. It is much more complicated, however, to identify and delineate which lands should be part of a protection strategy to maintain or restore places and the natural resources they harbor. Of course, the area of protection interest will be dependent upon the conservation and recreation goals, needs, opportunities, and threats unique to each Legacy Place and will likely vary somewhat over time.

Further complicating the process of determining the area on which to focus protection efforts is resolving how best to incorporate recreation opportunities. Strategies to protect various conservation values can include many techniques other than acquisition. Providing public recreation opportunities, however, typically requires either that land is purchased in fee or that public access rights are acquired as part of an easement. **These issues demand significantly more detailed and locally-led evaluation. Local landowners, citizens, and governments all need to contribute to the decision-making process that determines which lands and waters are most appropriate for consideration to be protected.**

Because of this, no attempt is made here to precisely quantify the size or identify the shape of the areas most appropriate to include in a protection strategy. Rather, the Legacy Places are subjectively categorized as follows:

Small – those places where an overall protection plan will most likely incorporate less than 5,000 acres.
Medium – those places where an overall protection plan will most likely incorporate from 5,000 to 50,000 acres.
Large – those places where an overall protection plan will most likely incorporate more than 50,000 acres.

Protection Initiated

There are, of course, many ways in which lands and waters are protected. Some protection efforts incorporate formal agreements between agencies. Others are informal arrangements between neighboring landowners. Some protection measures are designed to be of limited or fixed term; others are permanent. Some protection occurs through incentive-based programs; in other cases, regulations protect important resources. The places identified in this report run the spectrum from those where minimal formal protection efforts have been initiated to those that are entirely within public ownership.

Although many protection techniques are available, public land ownership has historically been the most noticeable action and is the technique for which data are most readily available. The Department is also aware of much of the important work conducted by numerous private conservation and recreation organizations, both those that operate on a statewide level and those that are locally based. No doubt, however, significant protection has been accomplished at many places of which we are not aware. As a result, this subjective assessment on the amount of protection that has occurred at the Legacy Places is admittedly skewed towards public ownership and is subject to revision. Again, it is important to emphasize that public ownership is but one tool to protect places (and probably a decreasingly important tool in years to come) and that, conversely, public ownership by itself does not guarantee that the resources in question are, or will be, protected.

It should also be noted that places in this report considered to be largely "unprotected" in a formal sense, almost by definition, owe their quality and importance to the private landowners who have managed and nurtured these lands and waters for generations. Without the strong stewardship ethic of Wisconsin landowners, far fewer places would retain the quality to be considered important in meeting conservation and recreation

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needs. The intent of categorizing the degree to which protection efforts have been initiated is only to give readers a general, subjective view of accomplishments to date.

Also of note is that the amount of protection that has been initiated is independent of the amount of work that likely remains ahead – the focus of the next section. The categories used to describe the amount of protection that has been initiated are:

Limited – Little, if any, formal permanent protection has occurred. Most of the protection efforts to date are the work of individual landowners practicing a strong stewardship ethic.

Moderate – Some formal permanent or shorter-term protection work, either by a government or conservation or recreation group, has occurred. The protection efforts may have been focused on particular natural resource characteristics or attributes.

Substantial – A considerable amount of formal protection has already taken place or been attempted and, in many cases, represents several partners working together with landowners.

Protection Remaining

The amount of protection effort that has been focused in the past on a place is not always inversely proportional to the amount of protection need that remains. That is, for many places, the amount of work that has been accomplished to date is independent of the amount of work that remains. Components of determining how much protection work remains can include:

- the need for buffers to maintain ecological functions, biological diversity, and recreation use;
- the need to connect protected "islands" in an area together;
- the degree of threat of land use conversions in the area; and
- the degree to which existing local, state, and federal regulations may protect the resource types in question.

For example, the Apostle Islands have been the focus of a substantial amount of protection effort in the past. By most measures, only a limited amount remains to be done to ensure that the area retains its ecological and recreation values. The Baraboo Hills also have been the target of decades of protection effort by local governments, conservation and recreation groups, The Nature Conservancy, and the Department. Yet, unlike the Apostles, a substantial amount of work appears to remain if future generations are to enjoy this popular natural resource wonder.

The categories used to describe the amount of protection need that remains are:

Limited – Little, if any, formal permanent protection need likely remains. Protection work that does remain appears limited in scope and/or could be achieved using a variety of tools, including less formal ones.

Moderate – Some protection work remains and may range over a wide area or a number of different attributes, or require many partners.

Substantial – A considerable amount of protection effort remains to be undertaken if the Place is to maintain its conservation and recreation values. It appears likely that formal, permanent efforts by non-profit groups and government agencies are needed. Protection efforts will likely need to address many different threats and opportunities.

The intent of categorizing the amount of protection remaining is only to give readers a general, subjective view of how much work potentially lies ahead.

Conservation Significance

Each Legacy Place has been scored, on a relative scale, for its conservation significance. In determining this relative score, Department staff evaluated the following characteristics:

QUALITY

- The ecological quality of the habitats that are present (species richness, lack of exotics, diversity of structure, etc.)
- The degree to which the area is ecologically functioning (disturbance patterns, fragmentation, size, etc.)
- How viable the components of the area and the systems that support them are likely to be over a long period of time (threats of fragmentation, exotics, the size of the area, etc.)

RARITY

- The degree to which the place contributes to the survival and recovery of natural communities and species that are rare from a global, continental, Great Lakes region, state, or ecological landscape perspective.

RESTORATION POTENTIAL

- The degree to which restoration is likely to be successful in helping recover notable natural communities and species (cost v. benefit, long-term economic costs).
- The degree to which restoration efforts are compatible with maintaining areas important for working forests and farms.

By design, this evaluation is based upon the best professional judgment of Department staff with statewide responsibility for wildlife, forestry, endangered resource, wetland, water resource, and fishery management issues. As such, these scores are subjective

As has been noted elsewhere, ***all the places identified in this report currently do, or could in the future, play critical roles in meeting Wisconsin's conservation or recreation needs.*** These places are the "cream of the crop" and are all worthy of consideration for protection. Assigning "Conservation Significance" and "Recreation Potential" scores is only intended to allow readers to see, from the Department's viewpoint, different levels of the "cream" -- places that may be most important in meeting conservation and recreation needs, *from a statewide perspective,* over the next fifty years.

and are only intended to provide readers with a general picture of how these places may help meet statewide conservation needs.

The Legacy Places have been assigned a value on a five-point scale as follows:

★★★★★ = The area possesses outstanding ecological qualities, is of adequate size to meet the needs of critical components, and/or harbors natural communities or species of global or continental significance. Restoration efforts, if needed, have a high likelihood of long-term success.

★★★★ = The area possesses excellent ecological qualities, is of adequate size to meet the needs of most of the critical components, and/or harbors natural communities or species of continental or Great Lakes regional significance. Restoration efforts have a high likelihood of success.

★★★ = The area possesses very good ecological qualities, is of adequate size to meet the needs of some of the critical components, and/or harbors natural communities or species of state significance. Some restoration efforts will typically be important and have a very good chance of success.

★★ = The area possesses good ecological qualities, may be of adequate size to meet the needs of some of the critical components, and/or harbors natural communities or species of state or ecological landscape significance. Restoration efforts are likely needed and have a good chance of success.

★ = The area possesses good to average ecological qualities, may be of adequate size to meet the needs of some of the critical components, and/or harbors natural communities or species of ecological landscape significance. Restoration efforts are needed and have a reasonable chance of success, although long-term costs may outweigh benefits.

Clearly, many places have very high conservation values for some attributes, with other components having less value. For example, the Timm's Hill Legacy Place encompasses not only the Timm's Hill County Park, but also the surrounding forest and a series of lakes on the south side of the hill. Although several lakes have been developed, some of the small, meromictic lakes support a wide array of plants and animals (including some unusual and rare species), have few exotic species problems, and have excellent water quality. The surrounding forests are generally of average quality, but do support some small pockets of old-growth. Combining the high quality components with some of the less remarkable ones, the place's "conservation significance" score averages to three stars.

Recreation Potential

As with conservation values, each Legacy Place has been scored, on a relative scale, for its recreation significance. However, evaluating recreation issues presents a challenge since public access to places (an integral aspect of current recreation value) implies some form of public ownership --whether outright ownership or the acquisition of access rights. Since it is not the intent of this report to determine how places should be protected (that is, where public acquisition of land rights may be appropriate), assessing recreation value of these Legacy Places is limited to subjectively evaluating their potential. Thus, some Legacy Places that are currently protected through public ownership may be at or near their full potential, while others may not have reached any of their potential (and may never).

In determining this relative score, Department staff evaluated the following characteristics:

TYPES OF OPPORTUNITIES

- The variety of recreation activities that could be accommodated (based on topography, size, diversity of landscape features, etc.)
- The presence of water features that are suitable for recreation activities such as fishing, swimming, paddling, and boating.
- The degree to which the area could fill gaps in recreation demand and minimize conflicts between current and future recreation users.

ACCESSIBILITY TO RESIDENTS

- The area's proximity to large population centers.
- The area's ability to link recreation areas together and to urban centers.

By design, this evaluation is based upon the best professional judgment of Department staff with statewide knowledge and responsibility for outdoor, nature-based recreation. As such, these scores are subjective and are only intended to provide readers with a general picture of how these places may help meet statewide recreation needs.

The Legacy Places have been assigned a value on a five-point scale as follows:

★★★★★ = The area possesses outstanding recreation potential, could offer a very wide variety of land and water-based recreation opportunities, could meet many existing and anticipated future recreation demands, is of adequate size to accommodate multiple, potentially incompatible activities, could link important recreation areas, and/or is in close proximity to the state's largest population centers.

★★★★ = The area possesses excellent recreation potential, could offer a wide variety of land and water-based recreation opportunities, could meet several existing and anticipated future recreation demands, is of adequate size to accommodate some potentially incompatible activities, could link important recreation areas, and/or is in close proximity to large population centers.

★★★ = The area possesses very good recreation potential, could offer a variety of land and/or water-based recreation opportunities, could meet some existing or anticipated future recreation demands, may be of adequate size to accommodate some potentially incompatible activities, could link important recreation areas, and/or is near mid to large population centers.

★★ = The area possesses good to moderate recreation potential, could offer some land and/or water-based recreation opportunities, might meet some existing or anticipated future recreation demands, may not be of adequate size to accommodate potentially incompatible activities, could link recreation areas, and/or is near mid-sized population centers.

★ = The area possesses limited recreation potential, could offer a few (generally low-impact) land and/or water-based recreation opportunities, might meet some existing or anticipated future recreation demands, is likely not of an adequate size to accommodate potentially incompatible activities, could link recreation areas, and/or is near small population centers.

E. How specific recreation activities are addressed in this report.

Identifying specific places in this report that would be "good fits" for specific recreation activities, particularly those that require adequate buffers so as not to conflict with other users and nearby residents, is problematic for several reasons.

First, providing access to places for the public to participate in various recreation pursuits typically requires a public agency to either purchase the area outright or purchase public access rights via an easement. As has been mentioned frequently before, this report is not designed to identify *how* properties should be protected. Thus, it is not appropriate for this report to pre-determine which of these Legacy Places, or which parts of these places, should be protected via public ownership. For boating and paddling, two activities that do not require public lands, obvious opportunities are noted.

Second, when new state parks, forests, and wildlife, fishery, recreation, and natural areas are established (and the State has begun to purchase land within an approved boundary) a separate document, known as a Master Plan, is developed for the property. The Master Plan outlines both how the property will be managed and what recreation activities will be allowed in different portions of the property. For example, the Department is just beginning to develop the Master Plan for the newly purchased Governor Tommy G. Thompson Centennial State Park and Peshtigo River State Forest and will be considering how best to accommodate the wide variety of outdoor activities that might be offered. The public has many opportunities to be involved as Master Plans are proposed, developed, and implemented. Thus, if new state properties are established at these Legacy Places, there is a process to determine the outdoor activities for which they are best suited.

Third, assessing current gaps in recreation demand as well as anticipating where current properties will not be able to meet future demands has proven to be exceptionally difficult. Participation rates in some outdoor recreation pursuits are tied to demographic characteristics. For example, younger residents have higher participation rates for tent camping, canoeing, snowmobiling, ATV and personal watercraft riding. Conversely, older residents have higher participation rates for wildlife watching, non-motorized trail use, and RV camping. Men participate in hunting and fishing at significantly higher rates than do women. Thus, to some degree, future demand for particular types of recreation activities can be forecast by the changes that will occur to our population over the next fifty years (see the earlier discussion on recreation demands in Part I). However, it is nearly impossible to forecast what new types of outdoor recreation will be developed over the next fifty years. Even ten years ago, few would have predicted the rise in popularity of ATVs and mountain biking. Further, there is very limited information available on what the general public wants its existing and future collection of public lands to provide from a recreation perspective. Responding to changing needs and attitudes may best be accomplished once these demands and needs are better understood.

Because of these issues, recreation activities are addressed only in a general nature in this report.